GRAND PORTAGE RESERVATION TRIBAL COUNCIL

Kevin Pierard
NPDES Programs Branch Chief
USEPA Region 5
77 West Jackson Boulevard
Mail Code: MN-16J
Chicago, IL 60604-3507

Re: Grand Portage Reservation Request for Enforcement Intervention for US Steel Minntac Tailings Basin Discharge

May 25, 2011

Dear Mr. Pierard:

The Grand Portage Band (the Band) is a federally recognized Indian tribe, and is a member band of the Minnesota Chippewa Tribe (MCT). The Band has been working cooperatively with the Minnesota Pollution Control Agency (MPCA) and U.S. Steel, along with other MCT-member Bands, Fond du Lac and Bois Forte towards Minnesota Water Quality Standards (MN WQS) compliance for the US Steel Minntac mine tailings basin since 2005. All of the involved Bands retain hunting, fishing, and other usufructuary rights that extend throughout the entire northeast portion of the state of Minnesota under the 1854 Treaty of LaPointe[1] (the Ceded Territory). In the Ceded Territory, all the Bands have a legal and moral interest in protecting natural resources and all federal agencies share in the federal government's trust responsibility to the Bands to maintain those treaty resources.[2]

[1] Treaty with the Chippewa, 1854, 10 Stat. 1109, in Charles J. Kappler, ed., *Indian Affairs: Laws and Treaties*, Vol. II (Washington: Government Printing Office, 1904), available on-line at http://digital.library.okstate.edu/kappler/Vol2/treaties/chi0648.htm (last visited Feb. 1, 2010).

[2] *See, e.g.*, Exec. Order 13175—Consultation and Coordination With Indian Tribal Governments (Nov. 6, 2000) (stating "the United States has recognized Indian tribes as domestic dependent nations under its protection . . . .," there is a "trust relationship with Indian tribes," and "[a]gencies shall respect Indian tribal self-government and sovereignty, honor tribal treaty and other rights, and strive to meet the responsibilities that arise from the unique legal relationship between the Federal Government and Indian

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The Minntac mine is located near Mt. Iron, MN, and is within the ceded territories. The Minntac tailings basin discharges to three watersheds through engineered seeps and also via groundwater discharges. The tailings basin permit MN005249 expired July 31, 1992. Both surface and groundwater quality standards have been continuously violated since the permit was issued in February, 1989. Based on Schedule of Compliance contained in Section G. of the permit, it appears that MN WQS were being violated prior to re-issuance of the permit.

The Grand Portage Band is concerned about past, present, and future natural resource impacts from Minntac's tailings basin water discharges. Releases of high concentrations of sulfate, chloride, fluoride, manganese, hardness and conductance from seeps, along with the dilution and discharge of tailings basin waters is damaging to the fisheries and wild rice resources in the Sandy, Dark and West Two River watersheds.

In 2006, Minntac requested a NPDES permit re-issuance with a variance. One of the arguments set forth in the variance request was "exceptional circumstance" due to a failed attempt at a zero-discharge system. However, a failed attempt at a zero-discharge system should not have affected an application for a renewed permit and variance from water quality standards as stated in the application:

> **Environmental Impact Statement, Volume I, NPDES Permit Application, NPDES Permit No. MN0052493, U.S. Steel Corporation, Minnesota Ore Operations, August 2006,**
> *Page 18. Subpart 1. Exceptional circumstance. Paragraph 3. "The existing discharge is also an exceptional circumstance in that it represents a 40-year buildup of concentrations of dissolved solids, including sulfates and other pollutants for which variances are being requested. That buildup was the result of attempting a zero-discharge system, at the behest of federal and state regulators".*

The Minntac Environmental Impact Statement (EIS) identified sulfate as having the greatest potential for impacts to the downstream environment. The EIS provided that seepage from the basin had increased the concentrations of pollutants in the Dark and Sandy Rivers. The EIS also asserted that the Dark River violates water quality standards for sulfates, hardness, conductance and manganese under certain flow regimes. Additionally, the Sandy River violates water quality standards for sulfates, chlorides, hardness and conductance. The cause of the violations appears to be directly and exclusively related to the seepage and discharges from the Minntac tailings basin.

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tribal governments."), available at http://ceq.hss.doe.gov/nepa/regs/eos/eo13175.html (last visited Feb. 1, 2010).

Sampling conducted by Fond du Lac reservation staff in 2006 at various points along the West Two River found high concentrations of sulfates near the Minntac facility with a gradient of reduced concentrations further away from the facility. Likewise, concentrations of chloride, conductance, and total suspended solids all decreased the further downstream the sampling points were from the facility. The Minntac EIS stated that based on recent research, it is suspected that the presence of sulfates promoted the methylation of mercury. Sampling conducted by MPCA in 2001 showed relatively high concentrations of methylmercury in the Sandy and Pike rivers. Due to sulfate releases and resulting high methlymercury concentrations downstream from the tailings basin seepage points, mercury content of fish in the system is increasing. Any additional releases into these watersheds will continue to further negatively impact the fishery resources, potentially affecting the health of tribal members consuming fish.

Releases into the Sandy River watershed flow into the Pike River and eventually into Pike Bay of Lake Vermilion. Pike Bay is used extensively as a fishery by tribal members. Pike Bay also provides critical fish spawning habitat and is home to a walleye spawn collection facility. A portion of the Dark River is a designated trout stream, and it appears that releases of tailings basin waters through permitted seeps to this watershed could have significant impacts on the trout population. Permitting discharges of diluted tailings basin waters to the West Two River will also likely cause an increase in the concentrations of sulfates to both the West Two River and portions of the St. Louis River potentially impacting fisheries and wild rice used by tribal members.

Wild rice is a culturally significant resource for the Tribes in Minnesota. From historical reports and Band member accounts, wild rice has declined significantly in Sandy and Little Sandy lakes (the Twin Lakes) since the late 1960s or early 1970s. Evidence points to changes in water quality as the leading factor of decline. Releases from Minntac operations are suspected as the primary cause. Based on MPCAs' water depth analysis for wild rice presented in the 2006 EIS water levels are still suitable for wild rice growth. Survey work conducted by the 1854 Treaty Authority and Fond du Lac Reservation in 2003 found several good stands of wild rice remaining in the Pike River. Based on work completed in a 2010 study commissioned by US Steel, it appears that additional sulfate releases into the Sandy and Pike River watersheds may have contributed to depletion of wild rice stands to the point where there are no remaining viable stands. Only a few remaining stalks exist where the waters were once covered with wild rice.

The NPDES permit for seepage from the Minntac tailings basin has clearly failed to contain adequate limits to control all pollutants pursuant to federal law 40 C.F.R. § 122.44(d) (1) (i). Section 6.3 of the NPDES Permit Writers' Manual provides *"Once the applicable designated uses and water quality criteria for a water body are determined, the permit writer must ensure that discharges do not cause exceedences of these criteria.*

If, after technology-based limits are applied, the permit writer projects that a point source discharger may exceed an applicable criterion, a WQBEL must be imposed. EPA regulations at 40 C.F.R. § 122.44 (d) require that all effluents be characterized by the permitting authority to determine the need for WQBELs in the permit."

Not only are the existing permit terms inconsistent with 40 C.F.R. § 122.44(d) (1) (i), it appears that the SOC's that have been issued since 1989 have been ineffective in terms of stipulations that would bring the company into compliance with MN WQS, and to our knowledge WQBELs have never been issued by MPCA to limit pollutant loadings to impaired waters of the State.

In 2000, MPCA issued a letter of warning to Minntac for sulfate and specific conductance water quality violations from discharges at the facility. In 2001, the second Schedule of Compliance was entered into to develop information to complete a variance application for sulfate, specific conductance, hardness and chloride. In 2003, a new Schedule of Compliance was signed to further study the Sulfate-reducing Packed-bed Bioreactor (SPB) technology to reduce sulfate concentrations. Volume III of the Minntac NPDES permit application EIS, section A, page 5, subpart w, provides: *"In its Response to Comments on the draft Environmental Impact Statement, the MPCA stated* ***"the SPB is being tested for the effectiveness of removing sulfate from the wastewater and is a pilot project. If the technology proves to be ineffective, the MPCA will require the Company to choose another mitigation option from the SOC...*** *The other technologies/process changes that are listed in the EIS scoping document* ***were not fully assessed*** *under the October 2003 Schedule of Compliance (SOC) because the company and MPCA agreed that they appeared to be more problematic from either a technical or financial feasibility standpoint. If at some point the SPB did not work out, the other "shelved options" must be reconsidered."* The SPB was tested and found to be ineffective at removing the pollutants of concern

Beginning in 2006, Tribes suggested to MPCA and to U.S. Steel that mining companies in western States have successfully employed reverse osmosis/nano-filtration to comply with water quality standards. In 2007, another SOC was signed that superseded the 2006 SOC, and was again implemented and subsequently amended. Yet, the 2007 SOC again discussed SPB technology as a possibility, and discussed water modeling and water management as potential "solutions" prior to the company requesting a variance. In 2008, U.S. Steel sent MPCA an application for a reverse osmosis/nano-filtration wastewater treatment plant. In 2009, according to MPCA staff, U.S. Steel requested from MPCA that their application for a reverse osmosis/nano-filtration wastewater treatment plant be pulled from consideration. However, Tribes were not notified of this until a State and Tribal Mining meeting held in May, 2011.

In 2010, a barrier was installed between the tailings basin and the Sandy River which may reduce the amount of polluted water reaching the Sandy River, but will not cause

compliance with MN groundwater standards (MN protects all groundwater as a drinking water source) because the barrier only extends below the surface to bedrock. The bedrock formation is called the Biwabik Iron formation and is considered to be one of the most important aquifers in Northern MN. In fact, MPCA has considered designation of this aquifer as a "sole-source aquifer". With the exception of a barrier being installed, there has been no substantial progress made towards compliance with state standards in 22 years. As stated previously, a barrier alone is not sufficient to achieve compliance with MN WQS.

In light of the fact that there have been numerous SOC's written beginning in 1989, no WQBEL's required, violations of MN WQS that extend back to the re-issuance of the permit 22 years ago, no documentation of a permit renewal request within six months of the permit expiration date in 1992, and no significant fines for water quality violations in 22 years, we are requesting an investigation and assistance by US EPA as a remedy to the MPCA's apparent inability to require US Steel Minntac to comply with MN WQS.

Sincerely,

Norman Deschampe

Norman Deschampe, Chairman